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10/067,165	02/04/2002	Michael J. Wookey	P7231	4921

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EXAMINER

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ART UNIT	PAPER NUMBER
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2152

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/067,165
Filing Date: February 04, 2002
Appellant(s): WOOKEY ET AL.

RECEIVED

APR 18 2007

Technology Center 2100

Michael Martensen
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1/4/2007 appealing from the Office action mailed 9/22/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

GROUND OF REJECTION NOT ON REVIEW

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The following grounds of rejection have not been withdrawn by the examiner, but they are not under review on appeal because they have not been presented for review in the appellant's brief.

Claims 7-12 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3-4, 9-10 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dyer et al (Dyer), US 6,349,340, in view of Kamentsky et al (Kamentsky), US 2002/0065929.

(7) Claims Appendix

A substantially correct copy of appealed claim 7 appears on page 13 of the Appendix to the appellant's brief. The minor errors are as follows: Appellant has amended the term "remote service[s] components" to "remote service component" in line 9 of claim 7 without submitting an amendment.

(8) Evidence Relied Upon

6,349,340	Dyer et al.	2-2002
2002/0065929	Kamentsky et al.	5-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

Claims 7-12 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following terms lack proper antecedence basis:
 - i. Claim 7 – inconsistent use of “remote service” and “remote services”.

Claim Rejections - 35 USC § 102

Claims 1-2, 5-8, 11-14 and 17-18 rejected under 35 U.S.C. 102(e) as being anticipated by Dyer et al (Dyer), US 6,349,340.

As per claim 1, Dyer taught the claimed invention including a method of communicating in a remote service system comprising:

- b. Communicating a forward channel communication using a forward channel communication path (abstract, col.3, lines 38-39, col.4, lines 13-15, col.5, lines 54-57; e.g. channel for receiving client request or subscription for multicast data);
- c. Communicating a back-channel communication using a back-channel communication path, the back-channel communication path being established only after a forward channel communication path is established (col.2, lines 33-35, col.6, lines 26-29; determining and enabling the source communication channel for receiving the requested multicast data); and

- d. Using the back-channel communication path to multicast a message to a group of remote service components (col.1, lines 50-67, col.2, lines 31-38, col.4, lines 23-39; fig.1, once the client is subscribed to the data distribution service, server multicast message to all subscribing clients).

As per claim 7, Dyer taught the claimed invention including a method of communicating in a remote services system comprising:

- e. Assigning a plurality of remote service components within the remote services system with a respective plurality of unique remote services identifiers (col.2, lines 31-38, 44-47, col.3, lines 38-40, col.4, lines 23-39, col.7, lines 28-30, col.8, lines 44-45, 56-67);
- f. Communicating a forward channel communication using a forward channel communication path (abstract, col.4, lines 13-15, col.5, lines 54-57; channel for receiving client request);
- g. Communicating a back-channel communication using a back-channel communication path (col.2, lines 33-35, col.6, lines 26-29; determining and enabling the source communication channel for receiving the requested multicast data); and,
- h. Using the back-channel communication path to multicast a message to a group of remote service components based upon unique remote services identifiers corresponding to components of the group of remote service components (col.1,

lines 50-67, col.2, lines 31-38, col.4, lines 23-39, col.7, lines 7-35, col.8, lines 44-45, 56-67, col.9, lines 17-27; fig.1).

As per claim 13, Dyer taught the claimed invention including a remote services system comprising:

- i. A plurality of remote service components, the plurality of components including a respective plurality of unique remote services identifiers (col.2, lines 31-38, 44-47, col.3, lines 38-40, col.4, lines 23-39, col.7, lines 28-30, col.8, lines 44-52, 56-67);
- j. A forward channel communication path coupled to the plurality of remote service components (abstract, col.4, lines 13-15, 23-39, col.5, lines 54-57; channel for receiving client request);
- k. A back-channel communications path coupled to the plurality of remote service components, the back-channel communications path allowing multicast of a message to a group of components based upon unique remote services identifiers corresponding to components of the group of remote service components (col.1, lines 50-67, col.2, lines 31-38, col.4, lines 23-39, col.6, lines 26-29, col.8, lines 44-45, 56-67, col.9, lines 17-27; fig.1; fig.1).

As per claims 2, 8 and 14, Dyer taught the invention as claimed in claims 1, 7 and 13. Dyer further taught that the message being multicast is an administrative control message (col.4, lines 53-55).

As per claims 5, 11 and 17, Dyer taught the invention as claimed in claims 1, 7 and 13. Dyer further taught that the remote services system includes an intermediate mid level manager, the intermediate mid level manager performing the multicast (col.5, lines 46-50, col.7, lines 7-35, col.8, lines 16-20; data distribution manager).

As per claims 6, 12 and 18, Dyer taught the invention as claimed in claims 1, 7 and 13. Dyer further taught that the remote service system/remote service components includes an application mid level manager, the applications mid level manager sending a request to the intermediate mid level manager to perform the multicast (col.5, lines 43-45; Network application software).

Claim Rejections - 35 USC § 103

Claims 3-4, 9-10 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dyer et al (Dyer), US 6,349,340, in view of Kamentsky et al (Kamentsky), US 2002/0065929.

As per claims 3-4, 9-10 and 15-16, Dyer taught the invention substantially as claimed in claims 1, 7 and 13. Dyer did not specifically teach that the message being multicast is a bulk transfer request or a bulk data response. Kamentsky taught that the messages being multicast can be a bulk transfer request or a bulk data response (abstract, pp. 0006, 0023, 0031-0032, 0037, 0040-0041, 0044). It would have been obvious to one of ordinary skill in the art at the time the

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invention was made to combine the teachings of Dyer and Kamentsky because Kamentsky's teaching of effective transferring of bulk data enables Dyer's method to send large multicasting messages such as Universal Data Protocol message (see Kamentsky, abstract).

(10) Response to Argument

The examiner summarizes the various points raised by the appellant and addresses replies individually.

As per appellant's argument that:

(1) Dyer fails to disclose the establishment of a back-channel communications path only after a forward channel communication path is established. Dyer establishes a channel communications path, or a source channel for multicast data as it is referenced in Dyer, after it receives a request for multicast data from a plurality of client nodes. Once the requests are received, a source communication path is established to convey the requested multicast data to a data distribution manager and one or more data distribution libraries. Thereafter, a data is communicated to the requesting nodes or services **via the channel used to request the data.** The channel used to forward the multicast data appears to be the same channel upon which the request arrived.

In reply to argument (1):

Dyer's disclosure includes the teachings of processes and steps of a source server receiving requests from client nodes for data, establishing a source communication channel with

the client nodes and **multicast** the requested data to client nodes. Multicast technology is a one-to-many transmission method well known to one of ordinary skill in the art as a one-directional transmission method (see *RFC 1112, Host Extensions for IP Multicast*, incorporated by reference in Dyer patent).

Dyer disclosed to use a forward channel communication path for sending the server from the client node process for requesting data or subscription to data (col.1, lines 50-58, col.3, lines 38-39, col.5, lines 54-57: the channel for sending data request from the client node) and establish a back-channel communication path (col.2, lines 33-35, col.6, lines 26-29: source communication channel) from the server to the client node for **multicasting** the requested data (col.1, lines 50-58, **see specific col.5, lines 58-67, col.6, lines 1-3: *In transmitting data to processes 28 in client nodes 2, the preferred embodiment employs multicast technology to broadcast data to client nodes... the server sends to each client node all multicast data without regard to the requirement of each client node.***

Since multicasting is a one-directional transmission method well known in the art, the channel used for requesting/subscribing data in Dyer's teaching, which is client-to-server directional, **is NOT** the same channel as the multicasting channel used for transmitting the requested data from the server to the client node (multicasting in the direction of *server to client* node). Furthermore, the multicasting channel is only established to include specific client nodes after a request or subscription for data is received from requesting client node (request for join multicasting group can be found in *RFC 1112*, incorporated by reference in Dyer patent).

Although Dyer disclosed to "*forward the multicast data to the requesting client node process*", this step is performed after the client node receives the requested data *through*

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multicasting (col.5, lines 58-67, col.6, lines 1-8; specifically col.6, lines 6-8: *Finally, each client node must appropriately route the requested multicast data to requesting processes within the client node*). Notice: the processes 28 are part of a client node 2. Dyer disclosed a plurality of client nodes (see figure 1: client nodes 2) comprising Network application software 20 that includes high level processes 28 capable of requesting needed data from the server (figure 3: Fig.3 is a high level architecture of a typical network client node in Fig.1). This shows that processes 28 are part of client node 2. With this understanding, the step of *forwarding* is internal to the client node, which CANNOT be part of the back-channel used for multicasting (col.5, lines 58-67: *employs multicast technology to broadcast data to client nodes...By using multicast technology, the server can send a packet of data once, with each client node receiving the broadcast data packet simultaneously*). Furthermore, the transmission method of *forwarding* cannot be equated to the transmission method of *multicasting*.

In addition, since the claims do not specifically define the source and destination of the forward channel communication path (e.g. connecting points), the forward channel communication path can be interpreted, with the broadest interpretation, to be any of the communication paths connection two network entities whilst the back-channel communication path being the communication path established in response to the forward channel communication.

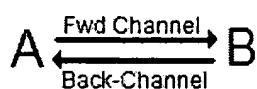
For example:

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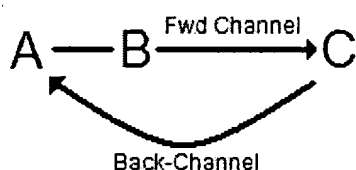
Interpretation 1



Interpretation 2



Interpretation 3



For the above reason, Dyer's teaching of client node sending request or subscription using one of the channels to the server reads on the claim languages.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


ksl



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